



City of Des Moines

King County Surface Water Design Manual (KCSWDM) – Core Requirement #5

Construction Stormwater Pollution Prevention

This guideline is intended to be used in conjunction with the King County Stormwater Design Manual. This document alone does not provide the necessary information to determine the correct threshold.

Full CSWPP Thresholds:

Any project that is subject to drainage review under the SWDM, excluding simplified drainage review. The thresholds for projects requiring drainage review are found in Section 1.1.1 of the SWDM. See section 1.1.2.1 for the thresholds of Simplified Drainage Review.

<http://www.kingcounty.gov/services/environment/water-and-land/stormwater/documents/surface-water-design-manual.aspx>

Small Site CSWPP Thresholds:

Appendix D of the KCSWDM states in section D.3.1. that “All projects that do any amount of land disturbing activity are subject to the ESC standards in this appendix per KCC 16.82.095(A) regardless of whether a permit is required or drainage review under the King County Surface Water Design Manual (SWDM) is triggered. Any such project that is not subject to drainage review under the SWDM and that disturbs soil on less than 1 acre of land may use the Small Site CSWPP requirements contained in this section. In addition, these projects must apply erosion and sediment control in accordance with KCC 16.62.

Any proposed project subject to Simplified Drainage Review as determined in Section 1.1.2.1 of the SWDM, and which disturbs soil on less than 1 acre of land, may use the Small Site CSWPP requirements contained in this section. These same requirements are contained in Appendix C of the SWDM, which details the drainage requirements for small agricultural and single family residential building or subdivision projects subject to Simplified Drainage Review.”

<http://www.kingcounty.gov/services/environment/water-and-land/stormwater/documents/surface-water-design-manual.aspx>

Construction SWPPP Thresholds:

Project site that disturbs 1 or more acres by clearing, grading, or excavating activities and discharges stormwater to surface waters of the state.

Coverage under a Construction Stormwater General Permit is required by construction site operators. A Construction SWPPP is required and shall comply with the standards and specifications contained in the King County Surface Water Design Manual and shall be submitted to the City of Des Moines for review. Prior to issuance of the grading permit, the applicant shall submit copies of the Notice of Intent (NOI) and the Construction General Permit issued by the Department of Ecology. Information on this permit may be found on the Washington State Department of Ecology’s website at:

<http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>

Full CSWPP Requirements: (KCSWDM APPENDIX D.2)

This guideline is intended to be used in conjunction with the King County Stormwater Design Manual. This document alone does not provide the necessary information to complete a CSWPP submittal.

In accordance with Sections 2.3.1 and 2.3.3 of the King County Surface Water Design Manual (SWDM), prepare and submit a technical information report (TIR) and a CSWPP plan (comprised of the ESC plan and the SWPPS plan) for King County review. Utilize the standards and details for ESC (Section D.2.1) and SWPPS control (Section D.2.2) of this appendix. Incorporate any King County review comments as necessary to comply with Core Requirement #5, Section 1.2.5 of the SWDM, the Erosion and Sediment Control and Stormwater Pollution Prevention and Spill Control Standards in this appendix.

CSWPP Plan: A CSWPP plan, containing the ESC plan and the SWPPS plan, and showing the location and details of ESC and SWPPS measures, is required for all proposed projects. It shall include a CSWPP report, which includes supporting information for providing ESC and SWPPS measures and meeting CSWPP implementation requirements. A copy of the CSWPP plan with CSWPP report shall be kept at the project site throughout all phases of construction. All of the materials required for the CSWPP report are standard parts of engineering plan submittals for projects requiring drainage review. The simplest approach to preparing this report is to compile the pieces during preparation for submittal and include the report as a separate part of the CSWPP plan submittal package.

1) CSWPP Report (D.2.4.1): Shall include the following elements.

- A detailed construction sequence, as proposed by the design engineer or erosion control specialist, identifying required ESC measures and implementation requirements. See D.4.2. for a recommended construction sequence;
- A technical information report (TIR) and ESC and SWPPS plans for King County review in accordance with Sections 2.3.1 and 2.3.3 of the King County Surface Water Design Manual (SWDM). Incorporate any King County review comments as necessary to comply with Core Requirement #5 of the SWDM (Section 1.2.5) and the Construction Stormwater Pollution Prevention Standards in this appendix;
- Any calculations or information necessary to size ESC measures and demonstrate compliance with Core Requirement #5;
- Descriptions and any supporting documentation, operating procedures, precautions, logging and reporting requirements etc. for the project's SWPPS BMPs,
- An inspection and maintenance program in accordance with Section D.2.4.4 (p. D-114) that includes the designation of a certified CSWPP supervisor as point of contact; and
- Anticipated changes or additions necessary during construction to ensure that ESC and SWPPS measures perform in accordance with Core Requirement #5 and Sections D.2.1 (p. D-10) and D.2.2 (p. D-74).

2) ESC Plan (D.2.5.1):

- The site improvement plan shall be used as the base of the ESC plan. Certain detailed information (e.g., pipe catch basin size, stub-out locations, etc.) that is not relevant may be omitted to make the ESC plan easier to comprehend. At a minimum, the ESC plan shall include all of the information required for the base map of a site improvement plan (see Table 2.3.1A of the King County Surface Water Design Manual), as well as existing and

proposed roads, driveways, parking areas, buildings and drainage facilities (including existing and proposed flow control BMPs), utility corridors not associated with roadways, relevant critical areas¹⁴ and associated buffers, and proposed final topography. A smaller scale may be used to provide better comprehension and understanding.

- The following list provides the basic information requirements for the ESC plan and its supporting documentation. 1. Identify areas with a high susceptibility to erosion. 2. Provide all details necessary to clearly illustrate the intent of the ESC design. 3. Include ESC measures for all on- and offsite utility construction included in the permit. 4. Specify the construction sequence. The construction sequence shall be specifically written for the proposed project. An example construction sequence is provided in Reference Section D.4.2 (p. D- 139). 5. Include standard ESC plan notes. Standard ESC and SWPPS Notes are provided in Reference Section D.4.1 (p. D-137). 6. Include an inspection and maintenance program for ESC measures, including designation of a certified ESC supervisor and identification of phone numbers for 24-hour contact. 7. Include the basis and calculations for selection and sizing of ESC measures. 8. Include documentation, conditions of approval and discussion of approvals from other agencies for alternative treatment and/or disposal methods.
- The ESC plan must include the following information specific to applicable ESC measures and implementation requirements. Including clearing limits, cover measures, perimeter protection, traffic area stabilization, sediment retention, surface water control, wet season requirements, and critical areas restrictions. As noted above, this information may need to be updated or revised during the life of the project by the CSWPP supervisor or as directed by King County.

3) SWPPS Plan (D.2.5.2):

- The SWPPS plan shall address all phases of construction (e.g., clearing, grading, installation of utilities, surfacing, and final stabilization). The City may require large, complex projects to phase construction and submit multiple SWPPS plans for different stages of construction.
- The SWPPS plan must be kept on site during all phases of construction and shall address the construction-related pollution-generating activities outlined in Subsection A below. The plan must include a description of the methods the general contractor will use to ensure sub-contractors are aware of the SWPPS plan. A form or record must be provided that states all sub-contractors have read and agree to the SWPPS plan.
- At a minimum, the SWPPS plan shall address, if applicable, the pollution-generating activities, listed in subsection "A" of D.5.2.5., typically associated with construction and include the information specified below for each activity. If other pollution-generating activities associated with construction of the proposed project are identified, the SWPPS plan must address those activities in a similar manner.
- The SWPPS site plan element of the SWPPS plan shall include all of the information required for the base map (see SWDM Table 2.3.1.A), as well as existing and proposed roads, driveways, parking areas, buildings, drainage facilities, utility corridors not associated with roadways, relevant critical areas and associated buffers, and proposed final topography. A smaller scale may be used to provide more comprehensive details on specific locations of each activity and specific prevention measure. In addition to this information, the items listed in subsection "B" of D.2.5.2, at a minimum, shall be provided as applicable.

- Pollution Prevention Report - This report provides the specifics on pollution prevention and must include the following information in addition to the activity-specific information specified in Subsection A. The report must include the items listed in subsection "C" of D.2.5.2.
 - Spill Prevention and Cleanup Report - This report provides the specifics on spill prevention and cleanup and must include the following information in addition to any activity-specific information in Subsection A related to spill prevention. The report must include the items listed in subsection "D" of D.2.5.2.
- 4) Wet Season Requirements (D.2.4.2): Any site with exposed soils during the wet season (October 1 to April 30) shall be subject to the special provisions located in D.2.4.2. In addition to the ESC cover measures (see Section D.2.1.2, p. D-12), these provisions include covering any newly seeded areas with mulch and identifying and seeding as much disturbed area as possible prior to September 23 in order to provide grass cover for the wet season. A "wet season ESC plan" must be submitted and approved by the City before work proceeds or continues.

Small Site CSWPP Requirements: (KCSWDM APPENDIX D.3)

This guideline is intended to be used in conjunction with the King County Stormwater Design Manual. This document alone does not provide the necessary information to complete a CSWPP submittal.

It is the responsibility of both the applicant and the contractor to minimize erosion and the transport of sediment and pollutants to the greatest extent possible. You and/or your contractor will be required to evaluate each of the small site ESC and SWPPS requirements specified in Section D.3.2 of the KCSWDM for applicability to your project site. This evaluation and the proposed ESC and SWPPS measures to be used to meet these requirements will need to be documented in a Small Site CSWPP Plan that must be submitted to the City of Des Moines for approval prior to commencing land disturbing activities. See the submittal requirements and a sample small site CSWPP plan in Section D.3.6.

Small Site CSWPP Plan:

- 1) Document the evaluation and the proposed ESC and SWPPS measures specified in Section D.3.2 of the KCSWDM.
- 2) All construction activities shall be done in a manner that prevents pollution of surface waters and ground waters as specified in this appendix and King County's Stormwater Pollution Prevention Manual (SPPM). See "Control of Other Pollutants (SWPPS)" (Section D.3.5, p. D-131) for specific measures and references to applicable activity sheets in the SPPM. References to SWPPS BMPs from this appendix and applicable activity sheets in SPPM shall be included in the small site CSWPP plan.
- 3) The placement and type of proposed ESC and SWPPS measures are to be shown on a Small Site CSWPP plan map. This plan must be in accordance with the specifications for such plans outlined in Section D.3.6. One copy of the site plan or plot plan shall be used to show how ESC and SWPPS measures are to be applied to the site to comply with the Small Site CSWPP requirements. The approximate location and size of clearing limits, rock construction entrance, flow paths, silt fences, etc., should be indicated on the Small Site CSWPP Plan. Any plan must contain at a minimum the features listed in Section D.3.6.2.

Required Notes on the Small Site CSWPP Plan:

- If sediment is tracked offsite, public roads shall be cleaned thoroughly at the end of each day, or more frequently during wet weather, if necessary to prevent sediment from entering waters of the state. Sediment shall be removed from roads by shoveling or pickup sweeping and shall be transported to a controlled sediment disposal area. Street washing will be allowed only after sediment is removed in this manner. Street wash wastewater shall be controlled by pumping back onsite, or otherwise be prevented from discharging into drainage systems tributary to surface waters. **(This requirement shall be included as a note on the small site CSWPP plan.)**
- The contractor or other persons performing construction activities shall comply with the stormwater pollution prevention and spill control measures/BMPs specified for such activities in Section D.3.5 and/or the King County Stormwater Pollution Prevention Manual. **(A note to this effect must be put on the approved Small Site CSWPP plan.)**
- Prior to commencing construction, the applicant must identify to the City a contact person responsible for overseeing the installation and maintenance of required ESC and SWPPS measures and compliance with this appendix and the Stormwater Pollution Prevention Manual during construction. **(The name and contact information for this person must be on or attached to Small Site CSWPP plan at the time of construction.)**